Ease Excel Input

Here's how to add spinners, check boxes, and other useful controls to your worksheets. **By Helen Bradley**

Even if you've used Excel for years, you may not know about its form controls, which let you enter worksheet values using elements like sliders, spinners, list boxes, and check boxes. We'll show you how these controls work, give you handy tips for customizing them, and look at some applications.
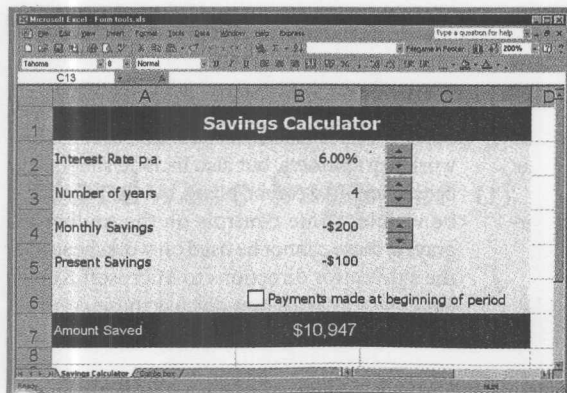
THE SPINNER CONTROL

The spinner lets you alter the value in a cell by clicking an up or down arrow on the control. The techniques for customizing spinners also apply to scroll-bar controls, so you're learning two controls in one, effectively.

Create a simple savings worksheet by entering the data shown in the table below. Note that row 6 is blank.

Cell	Value
A1	Savings calculator
A2	Interest rate p.a.
B2	6%
A3	Number of years
B3	4
A4	Monthly deposit
B4	-200
A5	Initial balance
B5	-100
A7	Amount saved
B7	=FV(B2/12, B3*12, B4, B5, 0)

This worksheet calculates the amount saved at the end of four years if you start with $100 and save $200 a month at an interest rate of 6 percent compounded monthly. Monies paid out are expressed as negative values, so your starting deposit and the monthly payments are negative. This simple example offers plenty of options for using spinners.

USING SPINNER CONTROLS, you can alter worksheet data with your mouse.

Begin by creating a spinner to adjust the number of years shown in cell B3. Choose *View | Toolbars | Forms* to display the *Forms* toolbar and locate the *Spinner* control. Click the control and place it by using your mouse to draw a rectangle in cell C3. Right-click the control, choose *Format Control...*, and select the *Control* tab. Set the *Current value* to 4, the *Maximum value* to 20, and the *Cell link* to B3, then click *OK*.

Deselect the spinner by clicking away from it in the worksheet; test the spinner by clicking its up and down arrows. As you click, the value in the linked cell (B3) should increase or decrease within the specified range.

OVERCOMING LIMITATIONS

Spinners are limited to returning integers between 0 and 30,000, but you can get a range of real numbers (including negative numbers) by performing some simple arithmetic on the value returned by the spinner. To show how this is done, we'll add a second spinner to adjust the interest rate in quarter-point increments.

Place the spinner in cell C2 and right-click on it. Choose *Format Control...*, select the *Control* tab, and set the *Current value* to 24, the *Maximum value* to 40, and the *Cell link* to E2, then click *OK*. Now format cell B2 to show percentage with two decimal places, and alter the cell's contents to read: *=E2/400*. When you click the new spinner, you'll see the value in cell B2 change in increments of .25 percent, from 0 to 10 percent. The new formula in B2 takes the value the spinner returns in cell E2 (a number from 0 to 40) and divides it by 400 to produce the displayed value.

You can also create a spinner to give you the negative value that represents your monthly deposit. Add a third spinner, this time in cell C4. Set the *Current value* to 200, the *Maximum value* to 30000, the *Incremental change* to 10, and the *Cell link* to E4, then click *OK*. In cell B4, type *-E4* and test the spinner. The E4 value will change in increments of 10 within the range 0 to 30000, giving B4 values ranging from 0 to -30000. You can create a range of values by using a different formula or by modifying parameters like the maximum value.

CHECK BOXES

Check boxes are controls that return either true or false, depending

Data Rescue Mission

I want to re-install an old, slow hard drive and use Windows Explorer to retrieve whatever data might be on it. Any advice?
ANNE EATOR

The only major piece of advice we have is to install the drive into a test computer rather than your primary one, if at all possible.

If the drive is damaged, Windows might have trouble reading it, and this difficulty could affect the operating system itself. Windows might have trouble booting and starting, and other problems might result. Worse, important configuration files within Windows could be damaged, preventing the OS from booting for good—even though the OS is on a completely different hard drive.

Bad hard drives—and bad hardware in general—can cause unpredictable problems with your existing system, so be kind to yourself and try to work with the bad hardware on a non-critical machine.—*Neil Randall*

Mysterious Macro Warning

When I open some Excel files, I get a warning that reads, in part: *Macros in this workbook are disabled because the security level is high, and the macros have not been digitally signed.* When I go to *Tools | Macro | Macros...* or to the Visual Basic Editor, I see no macros at all. What's going on?
MICHAEL JACOBS

Although Excel is warning you about potentially unsafe macros, the file may not contain macros. The file probably contains a Visual Basic module that has no Visual Basic for Applications code in it. To delete the module and get rid of the error message, open the file and select *Tools | Macro | Visual Basic Editor*. If Project Explorer isn't visible, select *View | Project Explorer*. Open the Modules folder, right-click on the module and select *Remove Module*. Select *No* if you're asked if you want to export the module. Save the workbook from the Visual Basic editor or from the workbook window.

Incidentally, this problem occurs only in Excel 2002 (Office XP). Excel 2000 does not give the same

warning, even though it has the same security options (when all the service packs are installed) as Excel 2002.—*Larry J. Seltzer*

Changing Columns in Word 2002

I have a document divided into three equal columns. I want to divide the third column in two without changing the first two columns. Is there a way to do that?
DANIEL COOPER

You need to redefine the section as four columns and set the width of each column separately. In your current document, choose *Format | Columns* and note the column width and spacing—2 inches wide, say, with 0.25-inch spacing. Remove the check from the *Equal Column Width* check box, then set the number of columns to 4 and set the first two columns to match your original width and spacing.

To get the widths for columns 3 and 4, subtract the original spacing from the original width and divide by two, which in this case yields 0.875 inches (which Word will round to 0.88). After you see the result, consider adjusting the spacing or width for the four columns.—*M. David Stone*

Getting a Partial Count Of Excel Entries

I'm using an Excel 2002 worksheet as an attendance register, with each column after the name column indicating whether the person showed up on a given date. I use X to indicate present and V to indicate vacation. At the bottom of the worksheet, I add up the number of people present and the number on vacation. Is there a formula that can automate the totals?
THOMAS CAN

Excel's `Countif` function is tailor-made for the task. If you're totaling the first 20 rows of column B, for example, the formula for counting the number of Xs in the column is: `=countif(B1:B20,"x")` The formula for counting the number of Vs is: `=countif(B1:B20,"v")` These formulas are not case-sensitive, so you can enter the Xs and Vs as upper- or lowercase.—*MDS*

on whether they are selected or cleared. They are useful for managing options that have only two possible settings, such as on/off, true/false, or 1/0. In our example, the last argument in the formula in cell B7 is currently set to 0, which indicates that the payment (the amount saved each month) is due at the end of every month. Changing this value to 1 alters the calculation to show the result when payments are made at the beginning of each month. This is a good use for a check box.

Click the *Check Box* control and add a check box into cell B6. Right-click this control and choose *Format Control... | Control* tab. From the *Value* options choose *Unchecked*. Set the *Cell link* to E6 and click *OK*. Alter the formula in cell B7 to read: `=FV(B2/12, B3*12, B4, B5, E6)`

Change the check box's text by right-clicking it and choosing *Edit Text*. In place of the current text, type: *Payments made at beginning of period,* then adjust the size of the control so the text can be clearly seen. Test the box by clicking in it; the value in cell B7 should change according to whether the check box is selected or not.

COMBO BOXES

The final control we'll look at is the combo box, which lets you choose an entry from a list. Combo boxes are handy when you have a fixed number of choices and can be used to return more than one piece of data from a table of data.

To understand more about the combo box control (and its close relative, the list box), type these values into a blank worksheet.

| Cell	Value
A2	J. Brown
B2	CA
C2	10%
A3	P. Smith
B3	NY
C3	12%
A4	J. Peters

More Knowledge Online

Three Microsoft Knowledge Base articles, all entitled "How to Use the Forms Controls on a Worksheet" shed more light on form controls for different Excel versions.
• Excel 2002: Q291073
• Excel 2000: Q214262
• Excel 97 and earlier: Q142135
Also check out article Q211722 for information about context-sensitive help, which is not available for some form controls.—*HB*
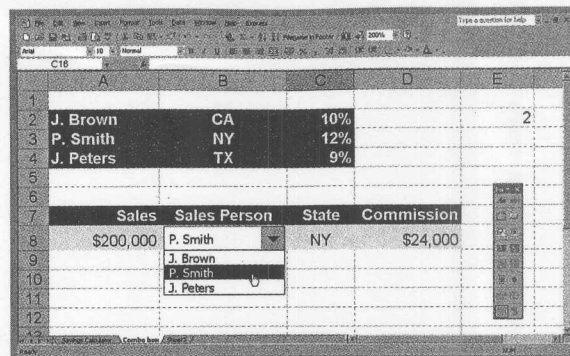
THE COMBO BOX control lets you to select an option from a list. An INDEX function extracts other information to create useful calculations.

Cell	Value
B4	TX
C4	9%
A7	Sales
B7	Salesperson
C7	State
D7	Commission
A8	200000
C8	=INDEX(A2:C4,E2,2)
D8	=INDEX(A2:C4,E2,3)*A8

Ignore the errors that appear in cells C8 and D8. Click the *Combo Box* control and draw a combo box in cell B8. Right-click the control, choose *Format Control...* and the *Control* tab, set the *Input Range* to A2:A4, set the *Cell link* to cell E2, and click *OK*. You can now choose a salesperson from the combo box. When you do so, the person's state will appear in cell C8 and the commission amount will appear in cell D8.

The combo box control returns the position of the selected item in the *Input range* list. The first item—J. Brown, in this example—is in position 1. In our sample worksheet, each INDEX function queries the array A2:C4 and returns the value in the row and column specified by the formula. The row number is the value returned in cell E2 by the combo box. The column number is supplied in the INDEX function itself.

Note that the data in column E is necessary but does not have to be visible. You can hide it by right-clicking the column and choosing *Hide*.

This covers the basics of using form controls on your worksheets. You'll find other controls on the *Forms* toolbar, such as the *Option Button,* the *List Box,* and the *Scroll Bar.* Each of these works in a similar way to one of the controls we've looked at. Option buttons work like check boxes, but only one at a time can be selected. Scroll bars work like spinners, but also include sliders. List boxes work like combo boxes, but the full list can be visible. Some controls on the toolbar are grayed; these cannot be used on worksheets. See the sidebar for directions to Microsoft Knowledge Base articles that discuss these controls.

Helen Bradley specializes in writing hands-on tutorials. Her columns appear regularly in a number of publications in Australia, Canada, the U.K., and the U.S. Contact her at helen@helenbradley.com.